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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/556,246	04/24/2000	Gregory D. Jay	21486-026 CIP	7464

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EXAMINER

MITRA, RITA

ART UNIT	PAPER NUMBER
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1653

DATE MAILED: 04/22/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

*File Copy*

<b>Office Action Summary</b>	Application N . 09/556,246	Applicant(s) JAY, GREGORY D.	
	Examiner Rita Mitra	Art Unit 1653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 November 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 10-13, 16-19, 21, 23, 25, 27-29, 40, 41 and 55-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 2, 11-13 and 16-18 is/are allowed.
- 6) ☒ Claim(s) 3-6, 10, 19, 21, 23, 25, 27-29, 40, 41 and 56-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other:  |

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## DETAILED ACTION

### *Status of the Claims*

Applicants' amendment and response to office action dated May 21, 2002, filed on November 21, 2002 in paper #13 is acknowledged. Claims 7-9, 14, 15, 20, 22, 24, 26, 30-39 and 42-54 have been canceled. Claims 1, 3-6, 10, 13, 16-19, 21, 23, 25, 27-29 and 40 have been amended. New claims 55-59 have been added. Therefore, claims 1-6, 10-13, 16-19, 21, 23, 25, 27-29, 40, 41, 55-59 are currently pending and are under examination.

### **Withdrawal of Objections/Rejections**

The rejection of claims 20, 22, 24 and 26 under 35 U.S.C. § 112, first paragraph is moot because the claims have been cancelled.

The rejection of claims 1-6, 10-13, 16-17, 40 and 41 under 35 U.S.C. § 112, first paragraph is withdrawn in view of Applicants' amendment to claims.

The previous rejection of claims 1-6, 13, 16 and 17 under 35 U.S.C. § 112, second paragraph is withdrawn in view of Applicants' amendment to claims.

The previous rejection of claims 1,2, 19-28 and 40, 41 under 35 U.S.C. § 102 as being anticipated by Turner et al. is withdrawn in view of Applicants' amendment to claims and remarks at page 5.

### **Rejection under 35 U.S.C. 112, Second Paragraph**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 10, 19, 21, 23, 25, 27-29, 40 and 41 are/remain rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 10 is indefinite since it is not clear what polypeptide residue(s) are responsible for “reducing the coefficient of friction” or is it the “O-linked oligosaccharide moiety” (which is not a peptide)?

Claim 19 is indefinite because of the use of the term “boundary-lubricating amount of a fragment.” What is that amount? It is also not clear what is the structure of the fragment in relation to the said stimulating factor. It is also not clear whether the said fragment has the same properties of the megakaryocyte-stimulating factor. Claims 21, 23, 25, 27-29 are included in the rejection because they are depended on rejected claim and do not correct the deficiency of the claim from which they depend.

Claims 21, 23, 25, 27, 28 and 29 lack antecedent basis as the claim is directed to a fragment comprising the amino acid sequence of residues of SEQ ID NO: 1, which has no basis in claim 19.

Claim 40 is indefinite for the phrase “composition is a film, membrane...” A correction to read as “composition is in the form of a film...” would overcome the rejection.

Claim 41 is indefinite because it is not clear how tribonectin would be a “membrane, foam, gel or fiber”?

Claims 56-59 are indefinite as to “MSF” since the full spelled out words are not used prior to the acronym/abbreviation.

### **Rejection under 35 U.S.C. 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 3 remains rejected under 35 U.S.C. 102(b) as being anticipated by Turner et al. (WO 92/13075, 6 August 1992). Turner et al. teach a human megakaryocyte stimulating factor (MSF) protein having 98.5% sequence identity to SEQ ID NO: 1 (see sequence alignment aal,

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Clark et al. Feb 2 1993, Database A\_Geneseq\_1101, Accession NO: AAR26049). Turner et al. and Clark et al. also teach alternatively spliced variants from the sequences encoding MSF protein (see WO'075, page 23, lines 17-30; and entire document of sequence alignment result), thus anticipating claim 3 of instant application. Turner et al. and Clark et al.'s sequence is considered for the entire sequence of tribonectin of claim 3 because the claim requires amino acid sequence 1-24 and 200-1404 of SEQ ID NO: 1 (claim 3). Therefore, claim 3 of the instant application is being anticipated by Turner et al and Clark et al.

Claim 4 remains rejected under 35 U.S.C. 102(b) as being anticipated by Turner et al. (WO 92/13075, 6 August 1992). Turner et al. teach a human megakaryocyte stimulating factor (MSF) protein having 99.6% sequence identity to SEQ ID NO: 1 (see sequence alignment aa7, Clark et al. Feb 2 1993, Database A\_Geneseq\_1101, Accession NO: AAR26049). Turner et al. and Clark et al. also teach alternatively spliced variants from the sequences encoding MSF protein (see WO'075, page 23, lines 17-30; and entire document of sequence alignment result), thus anticipating claim 4 of instant application. Turner et al. and Clark et al.'s sequence is considered for the entire sequence of tribonectin of claim 4 because the claim requires amino acid sequence 1-156 and 200-1404 of SEQ ID NO: 1 (claim 4). Therefore, claim 4 of the instant application is being anticipated by Turner et al and Clark et al.

Claim 5 remains rejected under 35 U.S.C. 102(b) as being anticipated by Turner et al. (WO 92/13075, 6 August 1992). Turner et al. teach a human megakaryocyte stimulating factor (MSF) protein having 99.2% sequence identity to SEQ ID NO: 1 (see sequence alignment aa8, Clark et al. Feb 2 1993, Database A\_Geneseq\_1101, Accession NO: AAR26049). Turner et al. and Clark et al. also teach alternatively spliced variants from the sequences encoding MSF protein (see WO'075, page 23, lines 17-30; and entire document of sequence alignment result), thus anticipating claim 5 of instant application. Turner et al. and Clark et al.'s sequence is considered for the entire sequence of tribonectin of claim 5 because the claim requires amino acid sequence 1-106 and 200-1404 of SEQ ID NO: 1 (claim 5). Therefore, claim 5 of the instant application is being anticipated by Turner et al and Clark et al.

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Claim 6 remains rejected under 35 U.S.C. 102(b) as being anticipated by Turner et al. (WO 92/13075, 6 August 1992). Turner et al. teach a human megakaryocyte stimulating factor (MSF) protein having 99.6% sequence identity to SEQ ID NO: 1 (see sequence alignment aa2, Clark et al. Feb 2 1993, Database A\_Geneseq\_1101, Accession NO: AAR26049). Turner et al. and Clark et al. also teach alternatively spliced variants from the sequences encoding MSF protein (see WO'075, page 23, lines 17-30; and entire document of sequence alignment result), thus anticipating claim 6 of instant application. Turner et al. and Clark et al.'s sequence is considered for the entire sequence of tribonectin of claim 6 because the claim requires amino acid sequence 1-25 and 67-1404 of SEQ ID NO: 1 (see sequence alignment aa2) and also 1-25, 67-106 and 200-1404 of SEQ ID NO: 1 (see sequence alignment aa3). Therefore, claim 6 of the instant application is being anticipated by Turner et al and Clark et al.

Claim 29 remains rejected under 35 U.S.C. 102(b) as being anticipated by Turner et al. (WO 92/13075, 6 August 1992). Turner et al. teach a human megakaryocyte stimulating factor (MSF) protein having 99.6% sequence identity to SEQ ID NO: 1 (see sequence alignment aa6, Clark et al. Feb 2 1993, Database A\_Geneseq\_1101, Accession NO: AAR26049). Turner et al. and Clark et al. also teach alternatively spliced variants from the sequences encoding MSF protein (see WO'075, page 23, lines 17-30; and entire document of sequence alignment result), thus anticipating claim 29 of instant application. Turner et al. and Clark et al.'s sequence is considered for the entire sequence of tribonectin of claim 29 because the claim requires amino acid sequence 1-66 and 105-1404 of SEQ ID NO: 1 (see sequence alignment aa6). Therefore, claim 29 of the instant application is being anticipated by Turner et al and Clark et al.

### *Conclusion*

Claims 3-6, 10, 19, 21, 23, 25, 27-29, 40, 41, 56-59 are rejected. Claims 1, 2, 11-13, 16-18 are allowable.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### *Inquiries*

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Rita Mitra whose telephone number is (703) 605-1211. The Examiner can normally be reached from 9:30 a.m. to 6:30 p.m. on weekdays. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Dr. Christopher Low, can be reached at (703) 308-2923. Papers related to this application may be submitted to Technology Center 1600 by facsimile transmission. Papers should be faxed to Technology Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Fax Center number is (703) 308-4242. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.



Rita Mitra, Ph.D.

April 14, 2003

  
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